

## PRELIMINARY DATA SHEET

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Barrett's versatile Wraptor<sup>TM</sup> robotic hands give you the flexibility you need to reduce costs and increase production

# BH8-600

## Liquid + Dust Sealed: IP65 Weight: 7.5 kg Payload: 50 kg

#### Big Functionality, Compact Form

The Barrett Wraptor is a multi-fingered programmable grasper with the dexterity to secure target objects of different sizes, shapes, and orientations. Even with its low weight (7.5 kg) and compact form, it is totally self-contained.

Communicating by industry-standard RS-232 serial, CAN, or Ethernet communications, integration with any arm is fast and simple. This industrial hand immediately multiplies the value of any arm requiring flexible automation.

The Barrett Wraptor neatly houses seven DSP-based brushless DC motor controllers and motors, software, and all communications electronics. Of its three multi-jointed fingers, two have an extra degree of freedom with 180 degrees of lateral mobility supporting a large variety of grasp types.

Combined with its versatile software routines, a single Barrett Wraptor matches the functionality of an endless set of custom grippers -- yet switches part/tool shapes electronically within 0.5 seconds.

Similar in function to a Swiss Army knife, the Barrett Wraptor integrates with your application by consolidating many custom gripper tools into a single smart grasper.

FEATURES & BENEFITS	
Low Maintenance	Replace finger pads quickly One million cycles MTBF Durable outer shell
Self-contained	Minimizes space, wires, and signal noise
All electric	Clean and quiet, no pneumatics or hydraulics No pumps, no hoses, no seals, no filters, no leaks
Industrial-toughness	Sealed for IP65 compliance Radiation tolerant Operates in temperatures from 0 to 70C
Failsafe, non-backdrivable	Object remains secure without power
fingers	Payload capacity not limited by active force
Brushless motors	Rare-earth magnets provide high torque, low mass Explosion proof (no brushes, no sparks) No brush replacements Vacuum compatibility
Supervisory control mode	Easily issue high-level commands
RealTime control mode	Enables user to close control loops externally
Communications: CAN, Ethernet, RS-232, RS-485	Controllable from any host PC, even a PalmPilot Easy integration with PLCs
Large Grasp Size	350mm wide flat object 150mm diameter cylindrical object

#### ADDITIONAL APPLICATIONS

- Component assembly
- Food handling
- Assembly line part orientation
- Quality control measurements for continuous process control
- Realtime environment
  interaction
- Handling castings
- Fiber bundles
- Glass and ceramics
- Meats and other foods
- Remote manipulation
- Biohazard material handling
- Nuclear waste management
- Search and Rescue
- Bomb disposal

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